

WHAT IS CLAIMED IS:

1. A semiconductor device, comprising:

a wiring board;

5 a semiconductor chip provided on said wiring board and having
a pad electrically connected to a wiring on said wiring board; and

a second semiconductor chip provided on said wiring board
at a position facing a side of said semiconductor chip, having
passive elements integrated therein, and having pads for external
10 connection to which both ends of the passive elements are connected
respectively and at least one of which is electrically connected
to the wiring on said wiring board electrically connected to the
pad of said semiconductor chip.

2. A semiconductor device as set forth in claim 1, wherein
15 the passive elements integrated in said second semiconductor chip
are elements of one kind, or two kinds or more selected from a group
of a capacitor, a resistor, and an inductor.

3. A semiconductor device as set forth in claim 1, wherein
said semiconductor chip is flipchip-connected to said wiring board
20 so as to electrically connect the pad to the wiring on said wiring
board.

4. A semiconductor device as set forth in claim 1, wherein
said semiconductor chip has bonding wire connection to the wiring
of said wiring board so as to electrically connect the pad to the
25 wiring on said wiring board.

5. A semiconductor device as set forth in claim 1, wherein
said second semiconductor chip is flipchip-connected to said wiring
board so as to electrically connect the pads for external connection

to the wiring on said wiring board.

6. A semiconductor device as set forth in claim 1, wherein said second semiconductor chip has bonding wire connection to the wiring of said wiring board so as to electrically connect the pads
5 for external connection to the wiring on said wiring board.

7. A semiconductor device as set forth in claim 1, wherein said semiconductor chip and said second semiconductor chip are both 60 μm or less in thickness.

8. A semiconductor device as set forth in claim 5, wherein
10 said second semiconductor chip has, besides the pads for external connection used for the flipchip connection to said wiring board, a pad for external connection not contributing to the flipchip connection to said wiring board.

9. A semiconductor device, comprising:
15 a plurality of semiconductor device portion units arranged in a lamination direction and each including: a wiring board; a semiconductor chip provided on said wiring board and having a pad electrically connected to a wiring on said wiring board; and a second semiconductor chip provided on said wiring board at a position facing
20 a side of said semiconductor chip, having passive elements integrated therein, and having pads for external connection to which both ends of the passive elements are connected respectively and at least one of which is electrically connected to the wiring on said wiring board electrically connected to the pad of said
25 semiconductor chip; and

a vertical wiring portion passing through said wiring boards of said plural semiconductor device portion units and electrically connecting said wiring boards to one another.

10. A semiconductor device as set forth in claim 9, wherein the passive elements integrated in said second semiconductor chips of the respective plural semiconductor device portion units are elements of one kind, or two kinds or more selected from a group
5 of a capacitor, a resistor, and an inductor.

11. A semiconductor package member, comprising:
a wiring board on which a semiconductor chip is mountable;
and

an auxiliary semiconductor chip provided on said wiring board
10 at a position facing a side of said semiconductor chip to be mounted, having passive elements integrated therein, and having pads for external connection to which both ends of the passive elements are connected respectively and at least one of which is electrically connected to a wiring on said wiring board.

12. A semiconductor package member as set forth in claim
15 11, wherein the passive elements integrated in said auxiliary semiconductor chips are elements of one kind, or two kinds or more selected from a group of a capacitor, a resistor, and an inductor.

13. A semiconductor device manufacturing method,
20 comprising:
mounting on a wiring board a semiconductor chip having a pad so as to electrically connect the pad and a wiring on the wiring board; and

mounting a second semiconductor chip having passive elements
25 integrated therein and having pads for external connection to which both ends of the passive elements are connected respectively, on the wiring board at a position facing a side of the semiconductor chip so as to electrically connect at least one of the pads for

external connection to the wiring on the wiring board electrically connected to the pad of the semiconductor chip.